

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)	Attorney Docket No. 082669045008
Corral, Bradley R. et al.)	
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Application No.: 10/750,799)	
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Filed: January 2, 2004)	
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For: PRODUCTION LINE BANDING)	
SYSTEM)	
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Examiner: Durand, Paul R.)	
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Art Unit: 3721)	
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Confirmation No.: 1828)	

AMENDMENTS TO CLAIMS

Claim 1 (Currently Amended) A production line banding system comprising:

a stationary support;

a strapping machine mounted to said support in a fixed position for dispensing a band, for retrieving said band and for tightening said band around product to be banded;

a guide element mounted to said support and movable horizontally between a first position and a second position, where in the first position ~~where~~ said guide element is adjacent said strapping machine and guides a dispensed band around a product and back to said strapping machine and during movement from the first position to the second position said guide element releases the band while moving away from said strapping machine ~~a second position where said guide element is spaced from said strapping machine~~; and

a delivering mechanism mounted to said support for moving product to be banded toward a position adjacent to said strapping machine and for moving banded product away from said strapping machine.

Claim 2 (Original) The system as claimed in claim 1 wherein:

said guide element has a generally C-shaped configuration wherein an open side of said configuration faces said strapping machine.

Claim 3 (Previously Presented) The systems as claimed in claim 2 wherein:

said guide element includes a pair of spring biased jaws for forming a passageway for said band, said jaws open and said band escapes from the guide element when said guide element moves from said first position to said second position.

Claim 4 (Previously Presented) The system as claimed in claim 3 wherein:

said delivering mechanism includes two sprockets at different vertical elevations, a chain mounted to said sprockets and a plurality of cradles mounted to said chain for receiving product in a generally horizontal disposition.

Claim 5 (Previously Presented) The system as claimed in claim 1 wherein:

said delivering mechanism includes two sprockets at different vertical elevations, a chain mounted to said sprockets and a plurality of cradles mounted to said chain for receiving product in a generally horizontal disposition.

Claim 6 (Previously Presented) The system as claimed in claim 1 wherein:

said strapping machine initially dispenses said band in a generally horizontal direction and retrieves said band in a generally horizontal direction.

Claim 7 (Original) The system as claimed in claim 1 wherein:

said strapping machine heat seals the band around said product.

Claim 8 (Original) The system as claimed in claim 4 wherein:

said strapping machine dispenses said band in a generally horizontal direction and retrieves said band in a generally horizontal direction; and

said strapping machine heat seals the band around said product.

Claim 9 (Currently Amended) A production line banding system comprising:

a stationary platform;

a strapping machine mounted to said platform in a fixed position;

a guide element mounted to move horizontally between a first and second positions during movement of banding material around product to be banded ~~position adjacent said strapping machine and a second position spaced from said strapping machine;~~

a generally vertical conveyor system for delivering product to be banded to a position adjacent said strapping machine;

a first generally horizontal conveyor system for moving product toward said vertical conveyor system; and

a second generally horizontal conveyor system for moving banded product away from said vertical conveyor system.

Claim 10 (Previously Presented) The system of claim 9 wherein:

said guide element receives a band from said strapping machine when said guide is in said first position and said band is removed from said guide element as said guide element moves from said first position to said second position.

Claim 11 (Previously Presented) The system of claim 9 wherein:

said vertical conveyor system includes cradles that invert to cause banded product to move from said vertical conveyor system to said second horizontal conveyor system.

Claim 12 (Previously Presented) The system of claim 9 including
a second strapping machine mounted to said platform;
a second guide element mounted to move between first and second positions; and
a second vertically disposed conveyor system to bring products to be banded to
said second strapping machine.

Claim 13 (Previously Presented) The system of claim 12 wherein:
said first mentioned and said second vertical conveyor systems include cradles
that invert to cause banded product to move from said first mentioned and said second vertical
conveyor systems to said second horizontal conveyor system.

Claim 14 (Previously Presented) The system of claim 13 wherein:
said first mentioned and said second guide elements receive bands from said first
mentioned and said second strapping machines, respectively, when said first mentioned and said
second guide elements are in said first positions and said bands are removed from said first
mentioned and said second guide elements as said first mentioned and said second guide
elements move from said first positions to said second positions.

Claim 15 (Previously Presented) The system of claim 14 wherein:
when said first mentioned and said second guide elements move respectively from
said first positions to said second positions, said first mentioned and said second strapping
machines tighten respectively said bands around said product.

Claim 16 (Previously Presented) The system of claim 10 wherein:
when said guide element moves from said first position to said second position,
said strapping machine tightens said band around said product.

Claim 17 (Previously Presented) The system of claim 9 including:

means for moving product from said first horizontal conveyor system to said vertical conveyor system.

Claim 18 (Previously Presented) The system of claim 9 wherein:

said guide element is mounted to said platform; and including:

an air cylinder for moving said guide element between said first and said second positions.

Claim 19 (Previously Presented) The system of claim 12 including:

means for moving product from said first horizontal conveyor system to said first mentioned and said second vertical conveyor systems.

Claim 20 (Previously Presented) The system of claim 12 wherein:

said first mentioned and said second guide elements are mounted to said platform; and including:

first and second air cylinders connected to said first mentioned and said second guide elements respectively for moving said first mentioned and said second guide elements between said first and said second positions.

Claim 21 (New) A production line banding system for elongated product to be banded comprising:

a stationary platform;

a strapping machine mounted to said platform in a fixed position;

a guide element mounted to move horizontally between first and second positions during movement of banding material around product to be banded;

a generally vertical conveyor system for delivering elongated product to be banded to a position adjacent said strapping machine, said product being disposed in a generally horizontal position;

a first generally horizontal conveyor system for moving said elongated product toward said vertical conveyor system, said elongated product being disposed in a generally horizontal position on said first horizontal conveyor system; and

a second generally horizontal conveyor system for moving banded elongated product away from said vertical system, said elongated banded product being disposed in a generally horizontal position on said second horizontal conveyor system.

Claim 22 (New) The system of claim 21 wherein:

said guide element receives a band from said strapping machine when said guide element is in said first position and said band is removed from said guide element as said guide element moves from said first position to said second position.

Claim 23 (New) The system of claim 21 wherein:

said vertical conveyor system includes two spaced apart cradles for receiving said elongated product to be banded from said first horizontal conveyor system, said cradles invert to cause banded elongated product to move from said vertical conveyor system to said second horizontal conveyor system.

Claim 24 (New) The system of claim 21 including:

a second strapping machine mounted to said platform in a fixed position;

a second guide element horizontally spaced from said first mentioned guide element and at about the same vertical elevation, said second guide element mounted to move horizontally between first and second positions;

said vertical system including two spaced apart cradles; and
said first and second guide elements being spaced closer than the space between
said two cradles.